

COURSE SYLLABUS	
Course code	1080-BU400-ISA-0404
Course name	Fundamentals of Building II
Course version	2027L
Level of education	first cycle programme
Form and mode of study	full-time study
Study profile	general academic profile
Field of study	Civil Engineering
Specialisation	-
Organizational unit	The Faculty of Civil Engineering
Implementing unit	The Faculty of Civil Engineering
Course unit	n/a
Course groups	-
Course status	Obligatory
Language of the course	English
Study stage code	BU000-S4-ISA-1080
Number of ECTS credits	2

Part I

01. Learning outcomes and the method of conducting classes

Learning outcomes	see table "Learning outcomes"
Forms of classes and the number of hours in the semester	
project	30,00 h

02. ECTS balance

Number of ECTS credits	2	
Course workload	Hours	ECTS
Total number of hours and ECTS credits for the course:		
Hours and ECTS credits for courses involving direct participation of academic teachers	32	1,28
Hours and ECTS credits involving student's independent work	18	0,72
Total	50	2,00
Number of hours involving direct participation of academic teachers:		
Hours connected with class participation	30	
Other synchronous hours	2	
Total	32	
Number of hours involving student's independent work:		
Hours for student's independent work	18	

03. Course content

Course content	Safety of structures. Fundamentals of structural design, partial factor method. Eurocode 0. Actions on the structure. Self-weight of the structure. Service actions. Snow actions. Wind actions. Eurocode 1 Combination of loads. Dimensioning of wooden roof trusses. Load collecting and static scheme application. Static calculation and dimensioning of rafters, purlins and columns. Eurocode 5 Dimensioning of ribbed floors. Collecting loads, selection and verification of load capacity of ribbed floor elements. Dimensioning of a masonry element loaded mainly vertically. Collecting loads and selecting a static scheme. Static calculation and dimensioning of an between-window pillar, between-door pillar or 1 mb wall. Eurocode 6.
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Table: Learning outcomes

Part I	
Knowledge	
Outcomes code	W1
Description	Knowledge of: basic terms, definitions and applicable regulations related to structural design; principles of structural systems and elements of building structure, understanding their function in the building;. Basic technologies used in construction and principles of construction work and building elements
Related field-of-study learning outcomes	K1_W09, K1_W15, K1_W16, K1_W17, K1_W18, K1_W23
Skills	
Outcomes code	U1
Description	To use the basic concepts of Civil Engineering; to form the structural systems and elements of the building structure, understanding their function in the building; to follow the rules of construction work and building elements; to prepare a report of static calculations for the design of the building construction.
Related field-of-study learning outcomes	K1_U07, K1_U15, K1_U18, K1_U23, K1_U26
Social competence	
Outcomes code	K1
Description	Being ready to: critically evaluate the knowledge; improve professional and personal competence; responsibly perform professional roles, taking into account the evolving needs of society, including: developing the achievements of the civil engineering profession, maintaining the ethos of the profession, observing and developing the principles of professional ethics, and acting to uphold these principles;
Related field-of-study learning outcomes	K1_K01, K1_K02, K1_K07

Part II	
04. Year and semester of studies	
Year	2027L
Semester	4
05. Course leader and course teachers	
Course leader	Wojciech Terlikowski
project	Kacper Wasilewski
project	Ewa Sobczyńska
06. Course objective	
Course objective	In accordance with the Course Regulations.
07. Teaching methods and techniques	
project	In accordance with the Course Regulations.
08. Methods of verifying learning outcomes	
Knowledge	
Outcomes code	W1
Description	Knowledge of: basic terms, definitions and applicable regulations related to structural design; principles of structural systems and elements of building structure, understanding their function in the building;. Basic technologies used in construction and principles of construction work and building elements
Verification methods	in accordance with the Course Regulations
Skills	
Outcomes code	U1

Part II

Description	To use the basic concepts of Civil Engineering; to form the structural systems and elements of the building structure, understanding their function in the building; to follow the rules of construction work and building elements; to prepare a report of static calculations for the design of the building construction.
Verification methods	in accordance with the Course Regulations
Social competence	
Outcomes code	K1
Description	Being ready to: critically evaluate the knowledge; improve professional and personal competence; responsibly perform professional roles, taking into account the evolving needs of society, including: developing the achievements of the civil engineering profession, maintaining the ethos of the profession, observing and developing the principles of professional ethics, and acting to uphold these principles;
Verification methods	in accordance with the Course Regulations
09. Required and recommended reading list	
Required reading	In accordance with the Course Regulations.
Recommended reading	In accordance with the Course Regulations.
10. Other information	
Other information	-